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de maximis, inc.

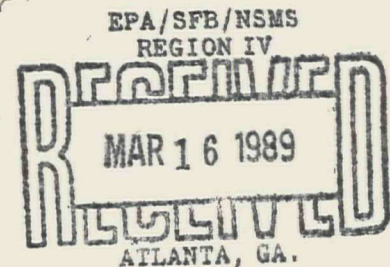
P.O. Box 90348
Knoxville, TN 37990
615-691-5052

Site:	Scordi Bluff
Break:	3.4
Other:	

March 15, 1989

Ms. Michelle Glenn
U.S. EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Subject: Shallow Monitoring Well Construction
Deep Monitoring Well Locations
Bluff Road Site
Columbia, South Carolina



Dear Ms. Glenn:

Enclosed please find two memos from IT Corporation regarding the above referenced topics. Included with the Shallow Well Construction memo is the data from wells 4A, 4B, 12A and 12B. Based on this data, it has been decided that the deeper shallow well is the most critical. Therefore, the remaining single wells will be constructed in the deeper configuration.

The proposed deep aquifer wells are shown on the accompanying figure with the justification included in the IT memo. It is our understanding that the purpose of the March 22, 1989 meeting with EPA and SCDHEC will be to finalize these locations so that no time delays will be experienced in the field.

At your direction, I am forwarding a copy of this submittal directly to the SCDHEC. If you have any questions, please contact me at (615) 691-5052.

Best Regards,

Michael A. Miller

Michael A. Miller
Project Coordinator

Enclosures

cc: Lorelei Borland
Coleman Miles



March 14, 1989

Mr. Bennie Underwood
de maximis, inc.
Post Office Box 90348
Knoxville, Tennessee 37990

Dear Bennie:

SUBJECT: BLUFF ROAD SHALLOW MONITORING WELL CONSTRUCTION

IT recommends that the remaining unpaired wells to be installed at the Bluff Road site be constructed to monitor the bottom of the upper aquifer, with the 10 foot screened interval to be immediately above the confining clay at 50 feet. This recommendation is based on the data received from newly installed monitoring wells MW-4A, MW-4B, MW-12A and MW-12B. These data are presented in the attached table. The data from MW-12A and MW-12B, towards the edges of the plume, are more conclusive than those of MW-4A and MW-4B in the central portion of the plume. MW-12B, which monitors the bottom of the shallow aquifer, shows low concentrations of 1,1,1-trichloroethane (5 ppb), carbon tetrachloride (25 ppb), and tetrachloroethane (27 ppb), none of which are seen in the shallow well MW-12A. Consequently, contaminants at the bottom of the aquifer appear to be moving more rapidly than at the top of the aquifer.

In reference to our conversation of March 9, 1989, at the Bluff Road Site, it is IT's understanding that you approve of sampling MW-7A and MW-7B for 48-hour turnaround of the volatile organic compound analysis. This will enable us to better predict the usefulness of the above-proposed well construction prior to implementation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Susan L. Gawarecki'.

Susan L. Gawarecki
Principal Investigator

lo

Attachment

SUMMARY OF SIGNIFICANT RESULTS (PPB)

<u>COMPOUND</u>	<u>MW-4A</u>	<u>MW-4B</u>	<u>MW-12A</u>	<u>MW-12B</u>
Methylene chloride	35(J)	22(J)	u	u
Acetone	53 (B,J)	65 (B,J)	54(B)	17(B)
1,1-Dichloroethene	64	65	u	1(J)
1,1-Dichloroethane	75	74	u	u
1,2-Dichloroethene	130	57	u	u
Chloroform	1700	2000	3(J)	2(J)
1,1,1-Trichloroethane	130	110	u	5
Carbon Tetrachloride	190	130	u	25
Trichloroethene	220	100	u	u
Tetrachloroethene	u	36(J)	u	27
1,1,2,2-Tetrachloroethane	440	78	u	u

TOTALS

Notes:

B - found in sample blank
J - Below quantitation limit
u - undetected



INTERNATIONAL
TECHNOLOGY
CORPORATION

March 14, 1989

Mr. Mike Miller
de maximis, inc.
Post Office Box 90348
Knoxville, Tennessee 37990

Dear Mike:

SUBJECT: BLUFF ROAD SITE PROPOSED DEEP MONITORING WELL LOCATIONS

This letter with the attached figure will serve as IT Corporation's justification for placement of the proposed confined (deep) monitoring wells at the Bluff Road site in Columbia, South Carolina.

Based on data previously collected by USGS and others, groundwater flow in the confined aquifer at the site is expected to be in a westerly or southwesterly direction towards the Congaree River.

A total of three wells will be required to monitor the confined aquifer. They will provide good triangulation needed to determine the potentiometric surface of the aquifer and confirm the direction of groundwater flow.

Deepwell DMW-1 has been located as a background well. Deep well DMW-2 has been located directly down gradient from the source area to intercept any contaminant plume from the site or from the surficial aquifer plume. DMW-3 is located at the edge of the surficial aquifer contaminant plume to provide the needed triangulation and to intercept any deep aquifer contamination moving south from the site.

If you have questions regarding these recommendations please contact me or Susan Gawarecki.

Sincerely,

Dwight G. Erikson

lo

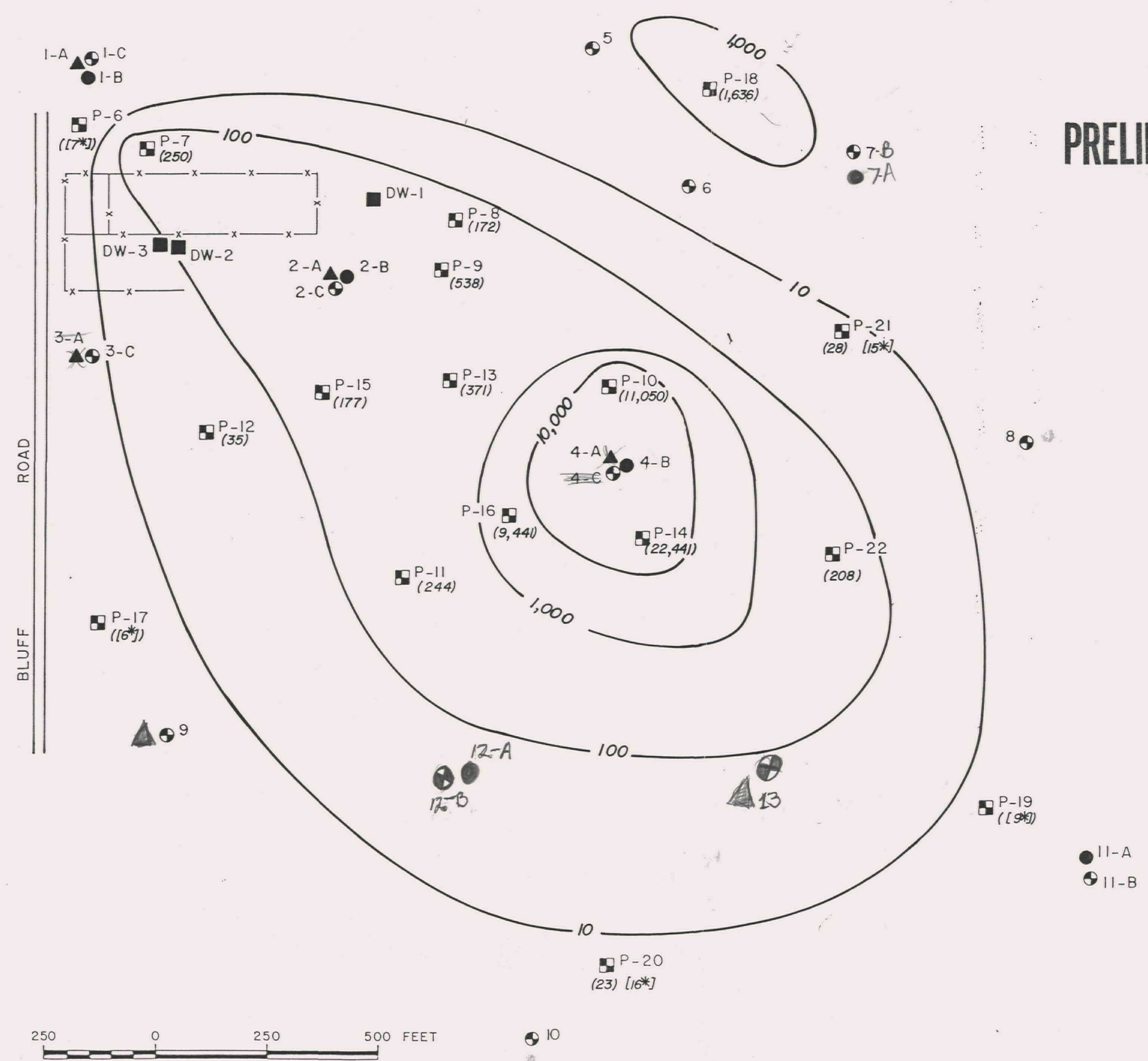
Attachment

Regional Office

312 Directors Drive • Knoxville, Tennessee 37923 • 615-690-3211

DRAWING NO.: 408619-B-C02
 PROJECT NO.: 408619
 INITIATOR: D ERIKSON
 PROJ. MGR.: D ERIKSON
 DATE LAST REV.:
 DRAWN BY:
 STARTING DATE: 1-27-89
 DRAWN BY: S. MOORE

BRUNING 72425



- LEGEND:
- SHALLOW MONITORING WELL (GOLDER)
 - DEEP MONITORING WELL (GOLDER)
 - ▲ PROPOSED MONITORING WELL - DEEP AQUIFER
 - PROPOSED DEEP MONITORING WELL - SHALLOW AQUIFER
 - ⊙ PROPOSED SHALLOW MONITORING WELL - SHALLOW AQUIFER
- (452) TOTAL VOLATILE ORGANICS (PPB)

to be done later after another meeting

NOTES: [9*] ACETONE AND/OR METHYLENE CHLORIDE FOUND IN SAMPLE BLANK AT EQUIVALENT LEVELS.

4B, 4C, 48 in turn-around on the results

CONCENTRATION CONTOURS
 TOTAL VOLATILE ORGANICS
 SCRD- BLUFF ROAD SITE
 COLUMBIA, SOUTH CAROLINA

INTERNATIONAL TECHNOLOGY CORPORATION